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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,300	03/23/2001	Georg Muenzel	00 P 7515 US 01	8037

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Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

VU, TUAN A

ART UNIT	PAPER NUMBER
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2193

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07/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/822,300	Applicant(s) MUENZEL, GEORG	
	Examiner Tuan A. Vu	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 4/28/08.

As indicated in Applicant's response, claims 1-53 have been canceled. Added claim 54 is pending in the office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dole, USPN 6,634,008 (hereinafter Dole); in view of Papadopoulos et al, USPN: 6,282,454 (hereinafter Papadopoulos) and admitted prior art (hereinafter APA--see Background of Invention, pg. 1-2 of Specifications).

As per claim 54, Dole discloses a method comprising:

automatically converting an industrial automation computer program from a first version (*Verilog file* – col. 8, lines 25-32; col. 8, line 63 to col. 9, line 19; col. 10, lines 32-56; col. 13, line 43 to col. 14, line 15; *netlist* – col. 14, lines 42-47; step 503 – Fig. 8; Fig. 11-12; *job steps*, *chain job* – col. 16, lines 5-9; col. 16, lines 53-55 – Note: all files generated from the EDA tool reads on internal representation of the automation program --see Dole: *electronic design automation tools* – Abstract) written in an industrial automation graphical programming language that is not interpretable by a web browser (e.g. Methodologies 401, RTL 405 – Fig. 9) to a second version written in a web-browser interpretable hierarchical textual markup language

(e.g. HTML, CGI - col. 7, lines 26-42; Fig 10; *more desirable to use XML* -col. 16, lines 10-47; Fig. 13); each of which version adapted to be compiled into machine-executable for said industrial automation (e.g. Fig. 10; delay calculation, gate simulation, Fig. 12; Fig. 13 – Note: RTL base language reads on language convertible into hardware program executable, and XML reads on script interpretable by Web engine to derive executable commands).

But Dole does not disclose that each of said first version and said second version adapted to be compiled into machine-executable code adapted for controlling an industrial process via a programmable logic controller. APA teaches industrial automation using PLC and existing graphical programming to support such automation control exist at the time the invention was made (see Specifications -bottom pg. 1 top pg. 2). The use of markup language (as in Dole's XML) as a medium to transmit Web-based application data (i.e. HTTP interpretable type) or metadata, or commands in support of code implementation for application running on target platforms was a known concept. In a context where HTML format can be transmitted to support a controller execution, Papadopoulos discloses a client human-interface interface to communicate HTML commands (*start, stop* – Fig. 4; col. 8 line 26 to col. 9 line 55) to a controller platform being a programmable logic controller (PLC 32 – Fig. 3) via a connectivity with a server and Ethernet stack, wherein a integrated circuit (ASIC chip - col. 5 lines 64 to col. 6 line 25) or communication chip (AM79C61 – col. 4 60 to col. 5, line 19) to implement hardware control program (ladder logic program -- col. 5 lines 48-62; Fig. 4) and message interpreting functionality of the PLC (col. 8 line 26 to col. 9 line 55). Based on the common methodology of using markup format (see Dole: Fig. 5-6) to support design, testing and control (Fig. 2, 5; tool execution ... executed by a shel- col. 10 lines 23-56; ig 9-10), and use of

integrated circuits as in Dole (Dole: integrated circuit 10- Fig. 1) in various domain of automation control, as taught by Papadopoulos from above, and the well-known support of graphical programming and PLC (see APA) to implement industrial automation control, it would have been obvious for one skill in the art at the time the invention was made to implement integrated circuit in Dole for applicability in industrial automation such that the first version (in Dole's industrial automation programming language) and the second version (being web-browser interpretable language) are compilable into a application executable on a integrated platform like the **PLC** as of Papoudopoulos. One would be motivated to do so, because industrial automation using PLC is a existing methodology while ASIC and integrated circuits are always used a hardware embodiments with processor capabilities for these various industrial control functionalities; and building integrated chips to implement PLC using Dole methodologies -- including converting these (first version) into markup type of transmittable format (second version) would enable transmission of the browser interpretable commands (as in Dole, Papoudopoulos) among NW machines -- to control and monitor hardware or NW behavior -- as illustrated in Papoudopoulos's use of Ethernet stack -- whereby the PLC-implementing integrated circuits would implement the common endeavor of control, verification or testing of industrial processes as contemplated by Dole and by Papoudopoulos (e.g. Fig. 4; *motor start* – col 9 lines 30-54), which is consistent with existing methodologies as set forth by APA.

Response to Arguments

4. Applicant's arguments filed 4/28/08 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

Declaration under § 1.132 by Muenzel:

(A) Applicant (Mr Muenzel) has submitted that Dole's 'environment for designing integrated circuits' is not pertinent to 'industrial automation' control program as claimed (Declaration: 12-14, pg. 3). With the approach using broad reasonable interpretation, it is noted that *industrial automation* program cannot preclude a scenario of a factory/development environment wherein programs are implemented to control functionalities of simulated circuits or design prototype being built. That is, an 'industrial automation program' by any stretch of imagination cannot absolutely exclude an automated process as in Dole using programs to simulate circuit functions within a integrated chip design environment, because simulation or verification entails automation using software to control execution of targeted industrial ICs.

(B) Applicant has submitted that one of ordinary skill cannot equate 'industrial control application' in para 18 with 'industrial automation program' (Declaration items 19-20, pg. 4). This remark is not associated with any claim language mapping with any cited portion of Dole; and largely misplaced.

(C) Applicant has submitted that in view of Dole's Fig. 10 and col. 16, one would not have equated 'design methodology' for IC with 'industrial automation computer program' (Decl: item 26, pg. 7). The 'industrial automation computer program' has been interpreted broadly and has been deemed not narrow enough a terminology to preclude Dole's automated processes and control code for simulating a target integrated circuit from reading onto this language.

(D) Applicant has submitted that 'second version' of 'industrial automation program' cannot be equated to the XML script in Dole capture of methodology for circuit design (Decl: pg. 8-9) in view of the 'written in a web-browser compatible markup language' of claim 54. This is deemed insufficient in order to prove to the contrary how Dole cannot teach this 'second

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version', because there is nothing in Dole's W3C XML format that would make XML not browser compatible.

(E) Applicant has submitted Dole's interface for designing integrated circuits and APA cannot be combined as set forth in the Office Action (Decl: pg. 9-10) to fulfill 'control logic' run by a PLC. The argument is moot in view of the new grounds of rejection.

(F) Applicant has submitted (Decl: pg. 11-12) Dole's graphical circuit design and VHDL cannot be relies upon to fulfill 'industrial automation program' adapted to be run by 'programmable logic controller' as by claim 54, even with the teaching of Dardinsky. The argument is moot in view of the new grounds of rejection.

Obviousness Rejection (items V, VI, Appl. Rmrks):

(G) Claim 54 necessitates a new ground of rejection, hence the remarks against Dole, Dardinski (Appl. Rmrks pg. 4) would be largely moot.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

July 10, 2008